Christophe Billiottet

Meet the Man behind Qatar's First Deep Technology Startup - ADGS

While treading on the journey dedicated to picking out the most Influential Business Persons, Prime View came to know about Christophe Billiottet, CEO, ADGS, one of the glorious gems shining in the tech world. Christophe Billiottet – The man who revolutionized how some countries handled the pandemic and its variants, such as the DELTA or the OMICRON with an ADGS flagship product, PANDEXIT. The World Innovation Summit for Health declared PANDEXIT one of the major health innovations for 2020, considering that the decision allowed by the product was saving a lot of lives and lowering the pandemic impact on economies.

Christophe Billiottet is not exactly what we could name a young entrepreneur: ex-fighter pilot,57 years, he has a history of 5 companies created since 1994, 2 of them with successful exits. The last one, ADGS, the first Deep Technology startup Company from Qatar, has been founded on a friendship with the purpose to do what he loved most, a bridge between science fiction and the modern world, something that is called "deep technologies". They are experts in Emergent Behavior (Agent-Based Modeling), Artificial Intelligence applied to Big Data and Behavioral Biometrics applied to CyberSecurity.

A differentiator in the deep tech segment: ADGS

In 2015, the foundation stone of ADGS was kept with the most brilliant minds available to build a small team. The idea was mostly to select very creative and competent employees based on their IQ and interestingly, it appeared that some of the selected persons had Asperger Syndrome, a light autistic behavior characterized by a remarkable focus and persistence, a strong aptitude to recognize patterns, and high attention to detail. ADGS is a company where they felt extremely comfortable and where they could flourish.

Christophe Billiottet said that no private investor was smart enough to understand the difference between "digital tech" and "deep tech" and the criteria were based on fast traction, the market size, the competition, and the number of potential customers.

The Beginning…

Investors were looking for smartphone apps, eCommerce applications and dreaming about the new Facebook, the new Google or the new WhatsApp, etc… None of these companies were particularly innovative in the matter of technology. In 2021, if there are still some successful digital startups, the world is now at the end of a wave where finding new digital markets becomes extremely difficult, except when a company is financially strong enough to absorb the competition. This is not innovation.

In 2015, the deep tech industry had no demand, no traction, no competitors, and hence, no investor interested to work with Deep Tech companies. The cost of maintaining such a company was high, the return not expected before years and the market was blurry.

This is where the experience of Christophe and its self-funding capacity helped create ADGS with the support of a great visionary institution, the Qatar Foundation. Developing a Deep Tech company might take 3 to 7 years of R&D before being able to deliver a marketable product. The expecting return can be of two orders of magnitude higher than what can be expected from a Digital Tech company.

Christophe Billiottet's Take on the Latest Technologies

Today, the world is rushing for Artificial Intelligence, an area where ADGS built strong and original algorithms and preparing the world of tomorrow is what deep technologies do: Artificial Intelligence, Behavioral Biometrics, Natural Language Processing, Biotechnologies or Agent-Based Modeling. These are the technologies that have the power to change our world.

Artificial Intelligence is based on a learning process, and the more data it learns from, the more useful AI can be. For predicting extraordinary events, there is a lack of data that will make AI at best imprecise, and usually completely wrong.

Innovative Solutions

ADGS developed some revolutionary models to simulate missing data, bringing millions of information to feed AI engines, using ABM simulation models.

ABM + AI algorithms allow you to solve problems you never knew could be solved and until now, a lot of Christophe's interlocutors still do not understand the scope of ADGS algorithms. In particular, ABM + AI algorithms are the only reliable predictive model to predict output for exceptional situations like COVID-19 spreading, building evacuation, military conflict output, or other major events where data is mostly inexistent.

With the idea to simplify the understanding of these concepts, the ADGS team created small videos

Christophe Billiottet
CEO & Founder | ADGS

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available on the company's YouTube channel and for those with a technology background, added academic articles on the website's "references" page.

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PANDEXIT allows decision-makers to know the ins and outs of their decisions: discovering the right policies against the OMICRON variant for instance needs parameters that are not yet available (at the time this article is written) and developing the efficient policies required to fight against the new variant are still unavailable. PANDEXIT, however, is already able to simulate the propagation of the disease and discovers the policies that can prevent the virus from becoming dominant. Unfortunately, most governments rely on old methods and take drastic measures where they are not necessary, or on the opposite, take timid and insufficient actions to stop the propagation of the virus. PANDEXIT fixes this problem.

Classic statistical designs are completely overwhelmed by the very diversity of vaccinated/unvaccinated, variants, preconditions, and travels. In PANDEXIT, a new variant just implies entering new parameters in the model, without any other modification. It takes a few minutes.

Cutting-edge technology, PANDEXIT, became a decisional product to allow governments to always have a decisive step ahead of the virus.

Some other products like CARP (Capital Asset Replacement Prediction), changed the way some early adopters Industries and Oil and Gas were handling their assets to lower their budgets. In the matter of Cyber Security and FinTech, STROKK solved the problems of 2FA ("two Factors Authentication") while vastly increasing the security of any password by using Keystroke Dynamics which is a Behavioral Biometric Methodology. TASMO ("Text Analysis and Semantic Modeling")

from left to right : Nahuel Gonzalez, Hector Oviedo, Christophe Billiottet

Hassan Al Ansari | President and Founder

handles Big Data with ease, whether structured or unstructured, using an advanced Natural Language Processing engine developed by ADGS.

Future Outlook

ADGS is currently working on an "Industrial process flows simulator applied to exceptional situations", like the one in Tchernobyl. The industrial flows can be simulated while the proper prevention or response can be discovered before or after catastrophic events occur. More generally, ADGS's next product will be able to simulate any failures at any stage in a long process and discover the domino effect such failure might produce.

Words of Wisdom

Starting a company must not be a solitary journey: two or three very different and complementary profiles are great elements of future success. You must also start with enough capital and be prepared to not be paid, or just the minimum. Also, the "entry ticket" of what you plan to develop must be high: if you have a nice idea, but that is easily reproducible for a reasonable cost, expect your idea to be copied as soon as it becomes slightly popular. In this case, you must rush for investor money or somebody else will.